

Accepted / Filed

JUN 20 2019

Federal Communications Commission  
Office of the Secretary

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Successful Authorization -- Date Paid: 6/20/19

FILE COPY ONLY!!

READ INSTRUCTIONS CAREFULLY BEFORE PROCEEDING	FEDERAL COMMUNICATIONS COMMISSION <b>REMITTANCE ADVICE</b> FORM 159 PAGE NO 1 OF 1		APPROVED BY OMB 3060-059
(1) LOCKBOX #979089			SPECIAL USE
		FCC USE ONLY	
SECTION A - Payer Information			
(2) PAYER NAME (if paying by credit card, enter name exactly as it appears on your card) <b>Wiley Rein LLP</b>		(3) TOTAL AMOUNT PAID (dollars and cents) <b>\$725.00</b>	
(4) STREET ADDRESS LINE NO. 1 <b>1776 K Street, N.W.</b>			
(5) STREET ADDRESS LINE NO. 2			
(6) CITY <b>Washington</b>		(7) STATE <b>DC</b>	(8) ZIP CODE <b>20006-2304</b>
(9) DAYTIME TELEPHONE NUMBER (INCLUDING AREA CODE) <b>202-7197000 x7235</b>		(10) COUNTRY CODE (IF NOT IN U.S.A.) <b>US</b>	
FCC REGISTRATION NUMBER (FRN) AND TAX IDENTIFICATION NUMBER (TIN) REQUIRED			
(11) PAYER (FRN) <b>0002151744</b>		(12) FCC USE ONLY	
IF PAYER NAME AND THE APPLICANT NAME ARE DIFFERENT, COMPLETE SECTION B IF MORE THAN ONE APPLICANT, USE CONTINUATION SHEETS (FORM 159-C)			
(13) APPLICANT NAME <b>Blow Up, LLC</b>			
(14) STREET ADDRESS LINE NO. 1 <b>126 Queen Street, Suite 204</b>			
(15) STREET ADDRESS LINE NO. 2			
(16) CITY <b>Honolulu</b>		(17) STATE <b>HI</b>	(18) ZIP CODE <b>96813</b>
(19) DAYTIME TELEPHONE NUMBER (INCLUDING AREA CODE) <b>808-5347101</b>		(20) COUNTRY CODE (IF NOT IN U.S.A.) <b>US</b>	
FCC REGISTRATION NUMBER (FRN) AND TAX IDENTIFICATION NUMBER (TIN) REQUIRED			
(21) APPLICANT (FRN) <b>0006935753</b>		(22) FCC USE ONLY	
COMPLETE SECTION C FOR EACH SERVICE, IF MORE BOXES ARE NEEDED, USE CONTINUATION SHEET			
(23A) FCC Call Sign/Other ID <b>KHKA</b>		(24A) Payment Type Code(PTC) <b>MMR</b>	(25A) Quantity <b>1</b>
(26A) Fee Due for (PTC) <b>\$725.00</b>		(27A) Total Fee <b>\$725.00</b>	FCC Use Only
(28A) FCC CODE 1 <b>31600</b>		(29A) FCC CODE 2 <b>Form302-AM</b>	
(23B) FCC Call Sign/Other ID		(24B) Payment Type Code(PTC)	(25B) Quantity
(26B) Fee Due for (PTC)		(27B) Total Fee	FCC Use Only
(28B) FCC CODE 1		(29B) FCC CODE 2	





**ORIGINAL**

Gregory L. Masters  
202.719.7370  
gmasters@wileyrein.com

June 20, 2019

**BY HAND VIA COURIER**

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
12<sup>th</sup> Street Lobby, TW-A325  
Washington, DC 20554

**Accepted / Filed**

**JUN 20 2019**

Federal Communications Commission  
Office of the Secretary

Re: **Blow Up, LLC**  
**FRN: 0006935753**  
**KHKA(AM), Honolulu, Hawaii (Fac. ID No. 31600)**  
**Application for Station License**  
**Request for Program Test Authority**

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Dear Ms. Dortch:

On behalf of Blow Up, LLC, licensee of AM station KHKA, Honolulu, Hawaii, we are submitting herewith an original and two copies of an application on FCC Form 302-AM for license to cover Construction Permit BP-20180419ABS. Program Test Authority is requested.

**The fee due for this application, \$725.00, has been paid, using the FCC Fee Filer system. A copy of Form 159 confirming the payment is included herewith.**

Should there be any questions concerning this application, please contact the undersigned.

Respectfully Submitted,

Gregory L. Masters

FOR  
FCC  
USE  
ONLY

**FCC 302-AM**  
**APPLICATION FOR AM**  
**BROADCAST STATION LICENSE**

(Please read instructions before filling out form.)

FOR COMMISSION USE ONLY

FILE NO.

BL-20190620A BD

**SECTION I - APPLICANT FEE INFORMATION**

1. PAYOR NAME (Last, First, Middle Initial)

Blow Up, LLC

MAILING ADDRESS (Line 1) (Maximum 35 characters)

126 Queen Street

MAILING ADDRESS (Line 2) (Maximum 35 characters)

Suite 204

CITY

Honolulu

STATE OR COUNTRY (if foreign address)

HI

ZIP CODE

96813

TELEPHONE NUMBER (include area code)

808-536-3624

CALL LETTERS

KHKA

OTHER FCC IDENTIFIER (If applicable)

2. A. Is a fee submitted with this application?



Yes



No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section



Governmental Entity



Noncommercial educational licensee



Other (Please explain):

C. If Yes, provide the following information:

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter fee amount due in Column (C).

(A)

FEE TYPE CODE		
M	M	R

(B)

FEE MULTIPLE			
0	0	0	1

(C)

FEE DUE FOR FEE TYPE CODE IN COLUMN (A)
\$ 725.00

FOR FCC USE ONLY

To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)

--	--	--

(B)

0	0	0	1
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(C)

\$
----

FOR FCC USE ONLY

ADD ALL AMOUNTS SHOWN IN COLUMN C, AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.

TOTAL AMOUNT REMITTED WITH THIS APPLICATION

\$ 725.00

FOR FCC USE ONLY

Accepted / Filed

JUN 20 2019

Federal Communications Commission  
Office of the Secretary

<b>SECTION II - APPLICANT INFORMATION</b>		
1. NAME OF APPLICANT Blow Up, LLC		
MAILING ADDRESS 126 Queen Street, Suite 204		
CITY Honolulu	STATE HI	ZIP CODE 96813

2. This application is for:

☒ Commercial
 ☐ Noncommercial  
☐ AM Directional
 ☒ AM Non-Directional

Call letters KHKA	Community of License Honolulu	Construction Permit File No. BP-20180419ABS	Modification of Construction Permit File No(s).	Expiration Date of Last Construction Permit 08/13/2021
----------------------	----------------------------------	--	--	--

3. Is the station now operating pursuant to automatic program test authority in accordance with 47 C.F.R. Section 73.1620?

☒ Yes ☐ No

Exhibit No.

If No, explain in an Exhibit.

4. Have all the terms, conditions, and obligations set forth in the above described construction permit been fully met?

☒ Yes ☐ No

Exhibit No.

If No, state exceptions in an Exhibit.

5. Apart from the changes already reported, has any cause or circumstance arisen since the grant of the underlying construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect?

☐ Yes ☒ No

Exhibit No.

If Yes, explain in an Exhibit.

6. Has the permittee filed its Ownership Report (FCC Form 323) or ownership certification in accordance with 47 C.F.R. Section 73.3615(b)?

☐ Yes ☐ No

☒ Does not apply

Exhibit No.

If No, explain in an Exhibit.

7. Has an adverse finding been made or an adverse final action been taken by any court or administrative body with respect to the applicant or parties to the application in a civil or criminal proceeding, brought under the provisions of any law relating to the following: any felony; mass media related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?

☐ Yes ☒ No

Exhibit No.

If the answer is Yes, attach as an Exhibit a full disclosure of the persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), and the disposition of the litigation. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 U.S.C. Section 1.65(c), the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

8. Does the applicant, or any party to the application, have a petition on file to migrate to the expanded band (1605-1705 kHz) or a permit or license either in the existing band or expanded band that is held in combination (pursuant to the 5 year holding period allowed) with the AM facility proposed to be modified herein?

☐ Yes ☒ No

If Yes, provide particulars as an Exhibit.

Exhibit No.

The APPLICANT hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because use of the same, whether by license or otherwise, and requests and authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended).


The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

### CERTIFICATION

1. By checking Yes, the applicant certifies, that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b).

☒ Yes ☐ No

2. I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Name Susan Eichor	Signature 	
Title Manager	Date June 18, 2019	Telephone Number 808-536-3624

**WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION**

### FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The Commission will use the information provided in this form to determine whether grant of the application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Your response is required to obtain the requested authorization.

Public reporting burden for this collection of information is estimated to average 639 hours and 53 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3080-0827), Washington, D. C. 20554. Do NOT send completed forms to this address.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

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(1942-2009)  
PAUL W. LEONARD, PE  
(1925-2011)

## ENGINEERING REPORT:

### APPLICATION TO COVER CONSTRUCTION PERMIT

KHKA, 1500 kHz  
5 kW ND

HONOLULU, HAWAII

BP-20180419ABS

JUNE 2019

## INTRODUCTION

Radio stations KHKA 1500 kHz and KLHT 1040 kHz have been relocated to make way for the light rail system in Honolulu. This report addresses the Special Operating Conditions outlined in the construction permits for KHKA and KLHT. These measurements were made the first week of June 2019.

Measurements were made by Stephen S. Lockwood, P.E. of Hatfield & Dawson and Robert Elder, BSEE of Kintronic Labs.

## SECTION I – Construction Permit Special Operation Conditions

*Condition 1 Licensee shall install a type accepted transmitter, or submit application (FCC Form 301) along with data prescribed in Section 73.1660(b) should non-type accepted transmitter be proposed.*

The transmitters are type accepted and each station is using a Nautel NX10.

*Condition 2 A license application (FCC Form 302) to cover this construction permit must be filed with the Commission pursuant to Section 73.3536 of the Rules before the permit expires.*

The License application Form 302 is provided in this report.

*Condition 3 Licensee shall be responsible for satisfying all reasonable complaints of blanketing interference within the 1 V/m contour as required by Section 73.88 of the Commission's rules.*

Licensees will comply with this condition.

*Condition 4 The licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.*

Licensees will comply with this condition. The site is encompassed with a locked chain-link fence with appropriate warning signs. Additionally, there is a fence with a locked gate around the building and fence with a locked gate around the base of the tower.



*Condition 5 Before program tests are authorized, sufficient data shall be submitted to show that adequate filters, traps and other equipment has been installed and adjusted to prevent interaction, intermodulation and/or generation of spurious radiation products which may be caused by common usage of the same antenna system by Stations KHKA and KLHT (ID#8415), and there shall be filed with the license application copies of a firm agreement entered into by the two stations involved clearly fixing the responsibility of each with regard to the installation and maintenance of such equipment. In addition, field observations shall be made to determine whether spurious emissions exist and any objectionable problems resulting therefrom shall be eliminated. Following construction, and prior to authorization of program test under this grant, both stations shall each measure antenna or common point resistance and submit FCC Form 302 as application notifying the return to direct measurement of power.*

This condition is averred to be met. Refer to supporting information ~~is~~ provided in Section II of this report.

*Condition 6 The fundamental field strength produced by this facility as determined by measurement a point 22 feet east and 105 feet south of the southeast corner of the main building at the Commission's Honolulu Office, shall not exceed 45 mV/m (93.1 dBu) at any time.*

Compliance with this condition is discussed in Section III of this report.

*Condition 7 Any and all spurious emissions, other than on frequencies contained within AM Broadcast Band, from this and other stations which are also in any way related to this station's facilities or transmission as detected by the monitoring equipment at the Commission's Honolulu monitoring station , shall be no greater than 0.71 uV/m (-3 dbu).*

Compliance with this condition is discussed in Section IV of this report.

*Condition 8 In the event of interference to the monitoring station's operations which is in any way related to this station's facilities or transmissions, the licensee shall take such corrective action as is necessary to eliminate the interference. Corrective action shall include the provision, installation, and adjustments of suitable transmitter filter circuits, shielding, or other appropriate devices which may be*

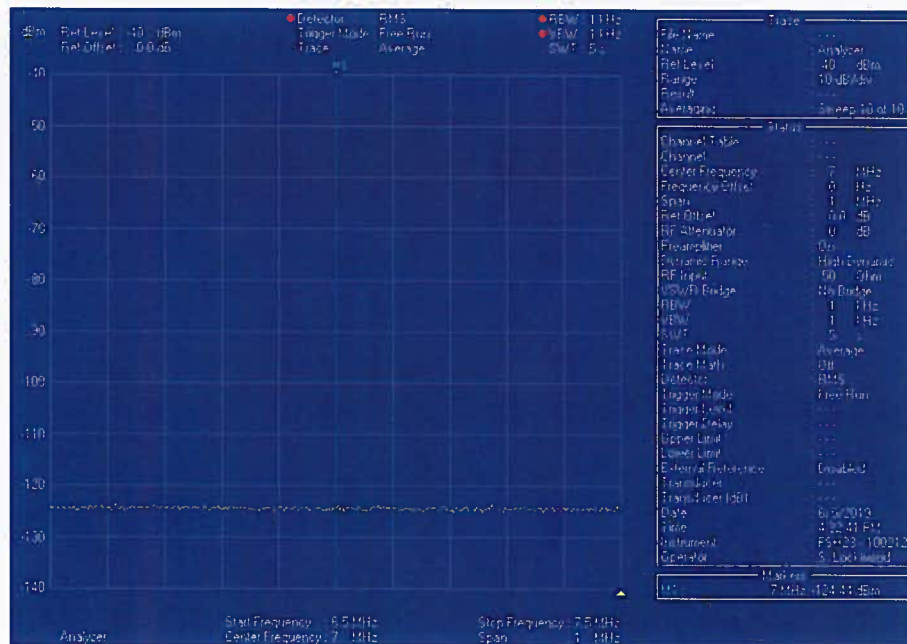


Figure 11 6.5 - 7.5 MHz

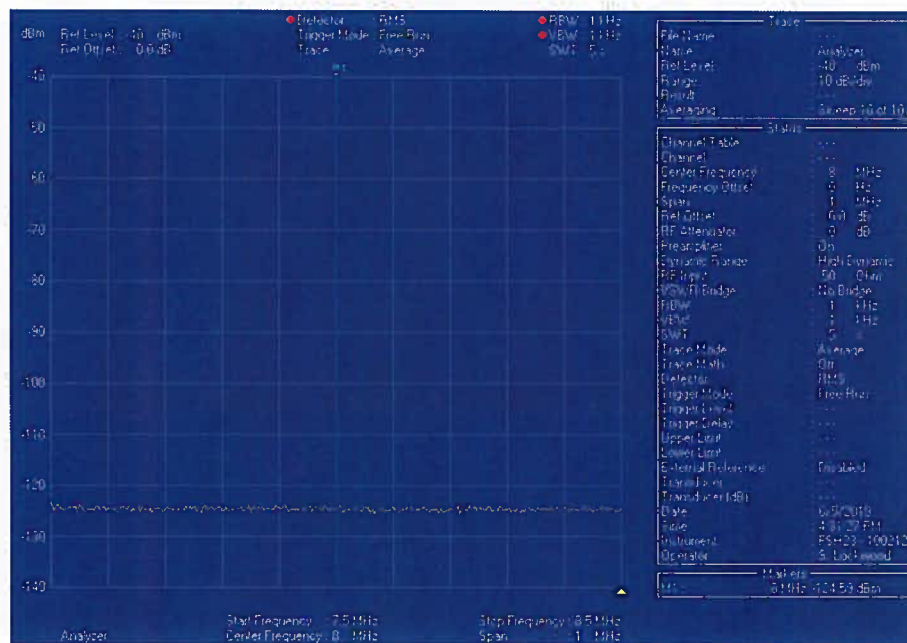


Figure 12 7.5 - 8.5 MHz

*required to eliminate the interference. If these or other measures do not eliminate the interference, the license shall reduce power to comply or cease transmissions.*

Licensees will comply with this condition.

*Condition 9      Ground system consists of 120 equally spaced, buried, copper radials about the base of the tower, each 45.7 meters in length.*

See drawing in Section V of this report.

## SECTION II INTERMODULATION MEASUREMENTS

Intermodulation measurements were made using a Rhode & Schwarz FSH3 Portable Spectrum Analyzer (100 kHz-3 GHz) with an Electro-Metrics Loop Antenna and two Potomac FIM 41. A Scott AM Notch Filter was also used along with various attenuators.

The measurements were made at the Ke'ehi Lagoon Beach Park which is west of the KHKA/KLHT site. Measurements were made at several locations within the park. These locations were: tennis court parking lot approximately 1000 meters from tower; rest rooms & pavilion approximately 490 meters from tower; and picnic table on canal east side of park approximately 290 meters from tower.

These measurements were challenging to make as there are 9 AM stations within 2 kilometers of these locations. All of these stations produce high signal strength which overload the Spectrum Analyzer and FIM Receivers and produce receiver generated intermodulation.

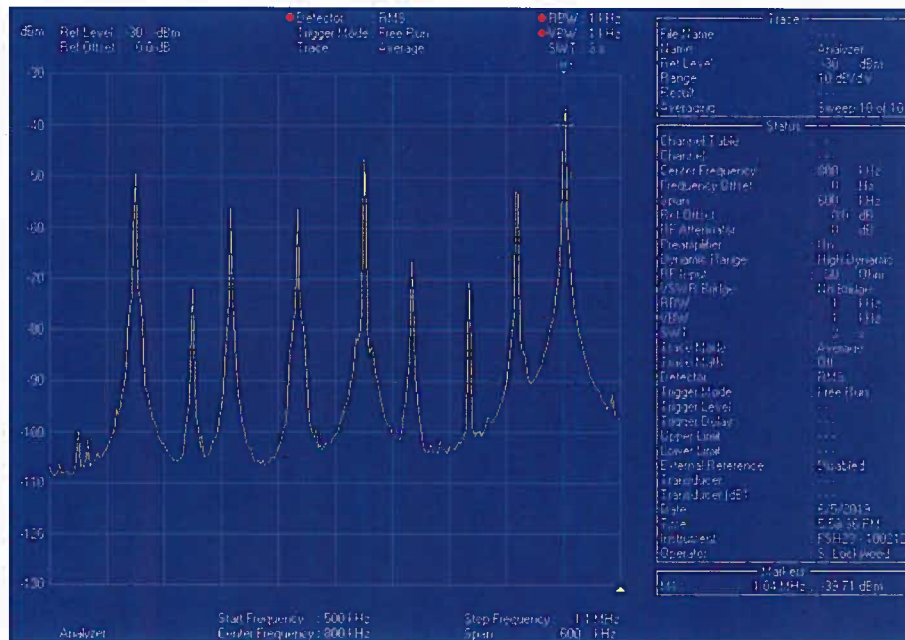


Figure 1 AM Band at Park 500 - 800 kHz

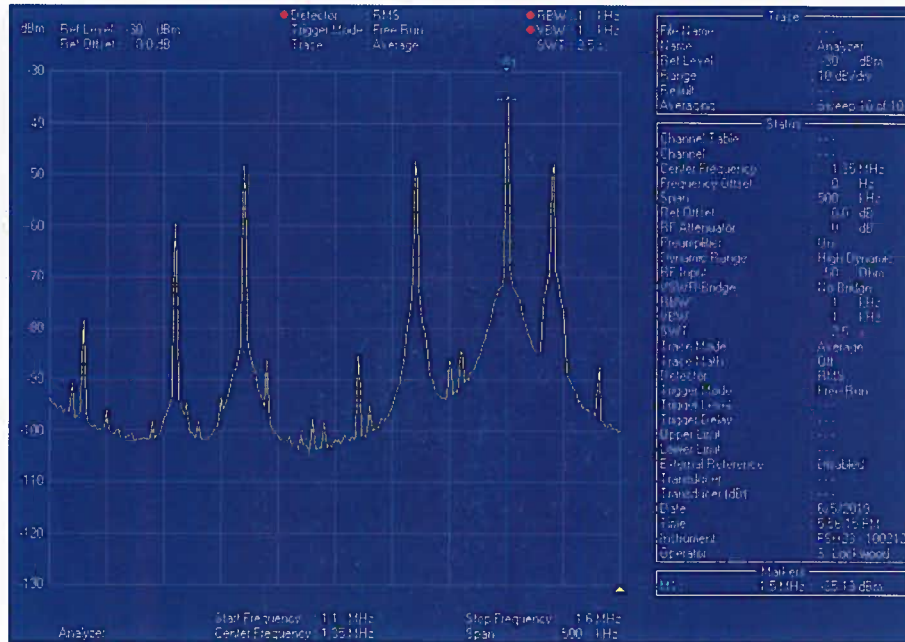


Figure 2 AM Band at Park 1.1 - 1.6 MHz

As shown on these spectral graphs, there are intermodulation products that are being produced within the spectrum analyzer. With the equipment available it was not practical to make definitive unambiguous measurements using the spectrum analyzer. Using the FIM 41, measurements were made for all of the following frequencies below 5 MHz.

Within AM Band		2660	4A-B
580	2A-B	2880	4B-3A
920	2B-2A	3000	2B-A
1160	4A-2B	3120	3A
1380	3B-3A	3460	3B-A
1620	3A-B	3580	2A+B
Extended Band on FIM-41 below 5 MHz		3700	5A-B
1960	2B-A	3920	4B-2A
2080	2A	4040	A+2B
2200	5A-2B	4160	4A
2420	3B-2A	4500	3B
2540	A+B	4620	3A+B

4740 6A-B

4960 4B-A

The following frequencies above 5 MHz were measured with the spectrum analyzer

40-meter band

		7280	7A
5080	2A+2B	7500	5B
5200	5A	7620	3A+3B
5420	5B-2A	7740	6A+B
5540	A+3B	7960	6B-A
5660	4A+B	8080	2A+4B
6000	4B	8200	5A+2B
6120	3A+2B	8540	A+5B
6240	6A	8660	4A+3B
6460	5B-A	9000	6B
6580	2A+3B	9120	3A+4B
6700	5A+B	9580	2A+5B
7040	A+4B	10040	A+6B
7160	4A+2B	10500	7B

Products in the 40-meter band were measured due to complaints from local amateur radio operators. These products, being 4<sup>th</sup> and 5<sup>th</sup> order products, seemed to be unlikely to be generated by the new diplexing system. Some of these mix products were observable but did not seem to be produced from the transmitter site where the maximum signal was observed with the antenna at right angle to the direction to the transmitter site.

This area has many signal scattering and non-linear junctions that can produce intermodulation. The Honolulu Authority for Rapid Transportation (HART) is constructing a bridge and station directly north of the site. At the time of the installation there were a number of construction cranes with booms exceeding 150 feet within 300 meters of the site. There is a high voltage transmission line that runs within 4 meters and 90 meters of two of the AM towers. The gantry cranes at port facilities on Sand Island, which are within 3 km of the site, contribute to the difficult electromagnetic environment. This is an exceedingly difficult measurement environment.





*Figure 3 Cranes within 300 meters of the KHKA&KLHT site*

To be certain that these mix products were not being produced within the KHKA & KLHT transmitters a sample was taken from the Toroidal Current Ammeter's transformer for each station (labeled TCA on the drawing). This signal was measured using the notch filter and the spectrum analyzer. There were no harmonic or intermodulation products visible above the noise floor of the spectrum analyzer where a dynamic range of greater than 100 dBc was achieved using the notch filter. We can be confident that none of the intermodulation products are being produced within the KHKA & KLHT transmitters.

We believe that the filtering on this facility is sufficient to meet the requirements of 47 CFR § 73.44 *AM transmission system emission limitations*.

## SECTION III FUNDAMENTAL FIELD STRENGTH MEASURED AT FCC MONITORING STATION

On 3 June 2019 between the time of 1500-1600. The field strength for KHKA, 1500 kHz was measured to be 19.3 mV/m. This signal was measured again the next afternoon to be 20.5 mV/m. This was measured on a Potomac Instruments FIM41 S/N 1951 calibrated 13 June 18. This signal is below 45 mV/m.



## SECTION IV SPURIOUS EMISSION AT THE MONITOR STATION

Spectral measurements were made at the monitoring station using a Rhode & Schwarz FSH3 Portable Spectrum Analyzer (100 kHz-3 GHz) with an Electro-Metrics Loop Antenna. These are shown in figures 4 through 13. It should be noted that this test configuration or an FIM41 are not capable of measuring signals as low as the  $0.71 \mu\text{V/m}$ . The FIM41 cannot measure below  $10 \mu\text{V/m}$  and the newer PI-4100 cannot measure below  $22 \mu\text{V/m}$ . The noise floor of this test set up misses the mark by 30 – 45 dB. This noise floor and signals below the noise floor cannot be measured effectively with standard communications industry and broadcast engineering test equipment.

Figure	Analyzer Noise Floor (dBm)	50 Ohms (dB $\mu\text{V}$ )	Antenna Factor (dB)	Apparent E Field (dB $\mu\text{V/m}$ )
4	-115	-8.0	50.0	41.99
5	-118	-11.0	50.5	39.49
6	-119	-12.0	50.0	37.99
7	-121	-14.0	43.0	28.99
8	-118	-11.0	43.0	31.99
9	-122	-15.0	43.0	27.99
10	-125	-18.0	45.0	26.99
11	-125	-18.0	45.0	26.99
12	-125	-18.0	45.0	26.99
13	-125	-18.0	45.0	26.99

We expect the thermal noise within a 5 kHz bandwidth to be -137 dBm presented to 50 ohm termination at the output connectors of a test antenna.

$$-137 \text{ dBm} = 10 \log(5000) + (-174 \text{ dBm/Hz})$$

The required  $0.71 \mu\text{V/m}$  is 18 dB below the expected thermal noise floor. This requirement seems to be unmeasurable and unreasonable. It also seems quite unachievable for a site that is 20 km from a large city with a major military base and airport within 10 km of the monitor station.

With these measurements and the additional measurements made within the antenna system of KHKA & KLHT we believe we comply with these requirements but have no way of definitively proving that this is the case.

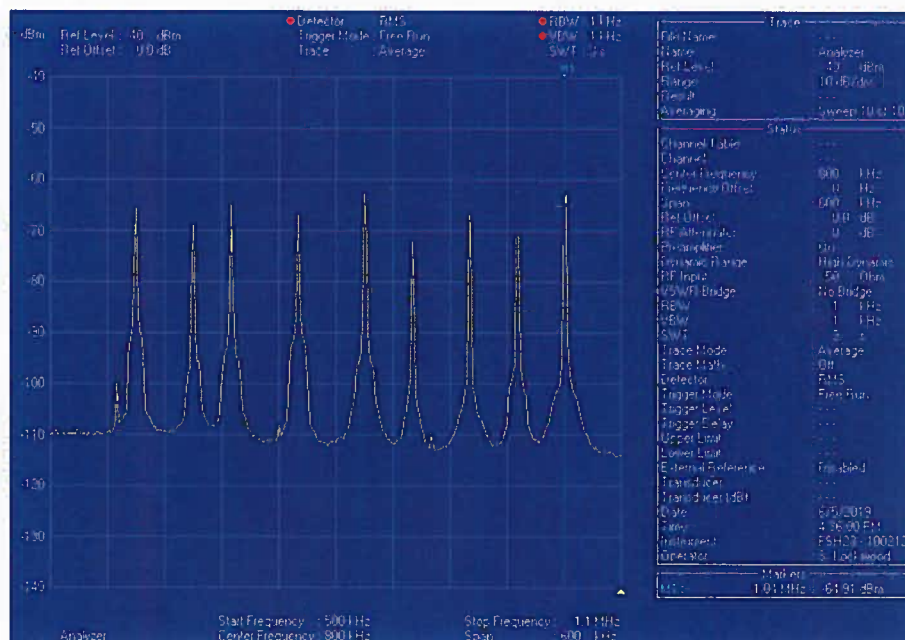


Figure 4 Lower AM Band 500-800 kHz

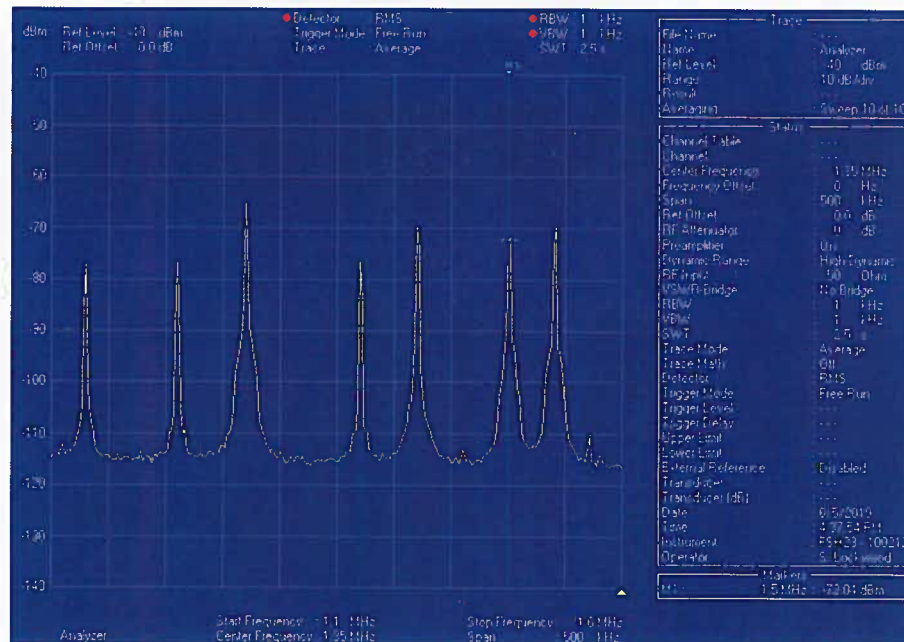


Figure 5 Upper AM Band 1.1 - 1.6 MHz

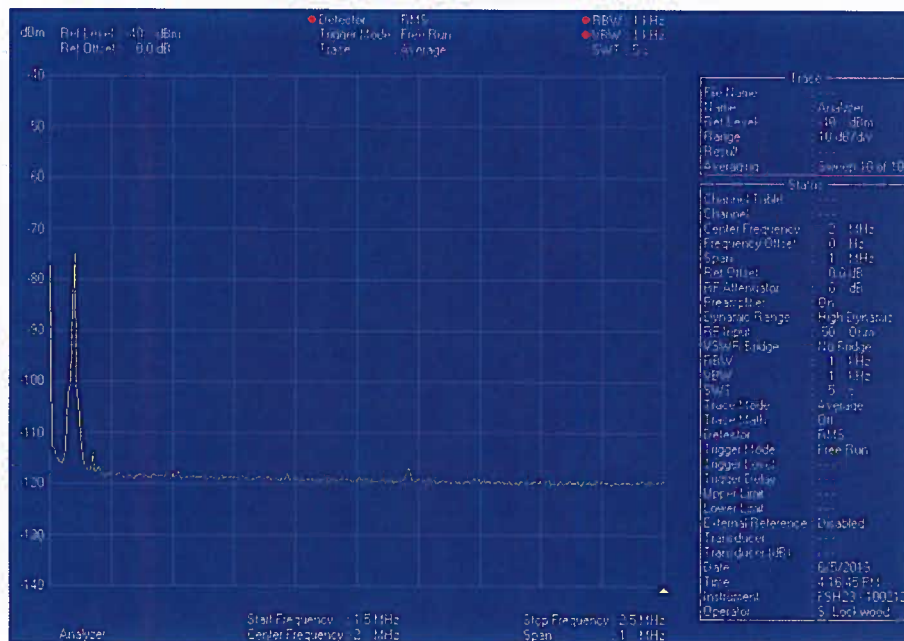


Figure 6 1.5 - 2.5 MHz

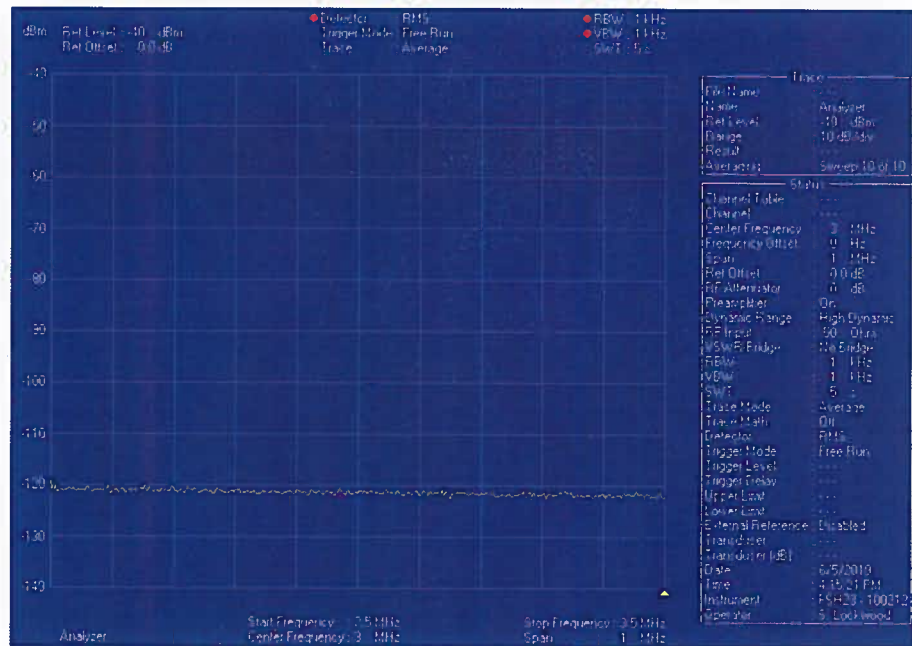


Figure 7 2.5 - 3.5 MHz

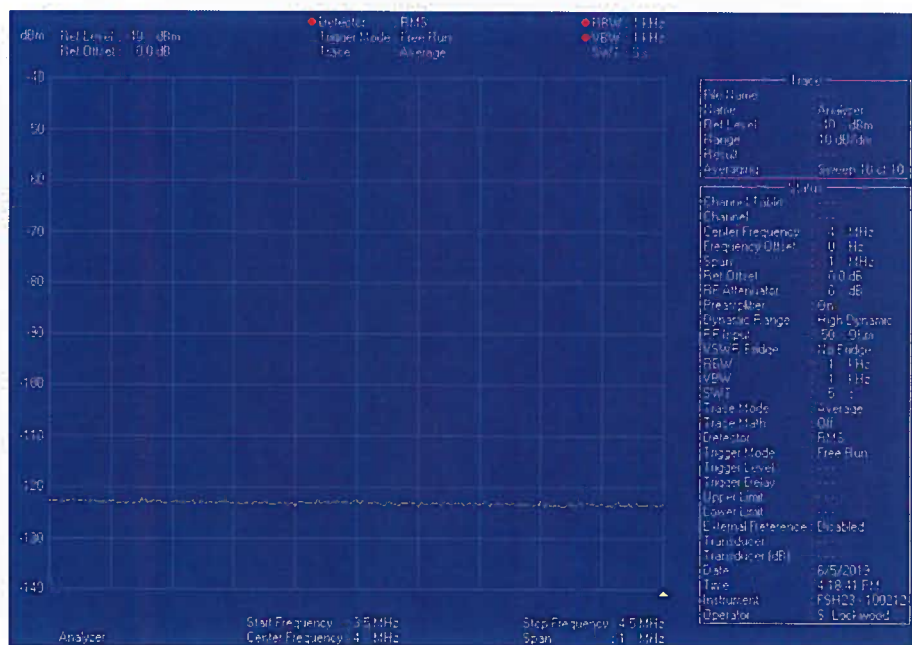


Figure 8 3.5 - 4.5 MHz

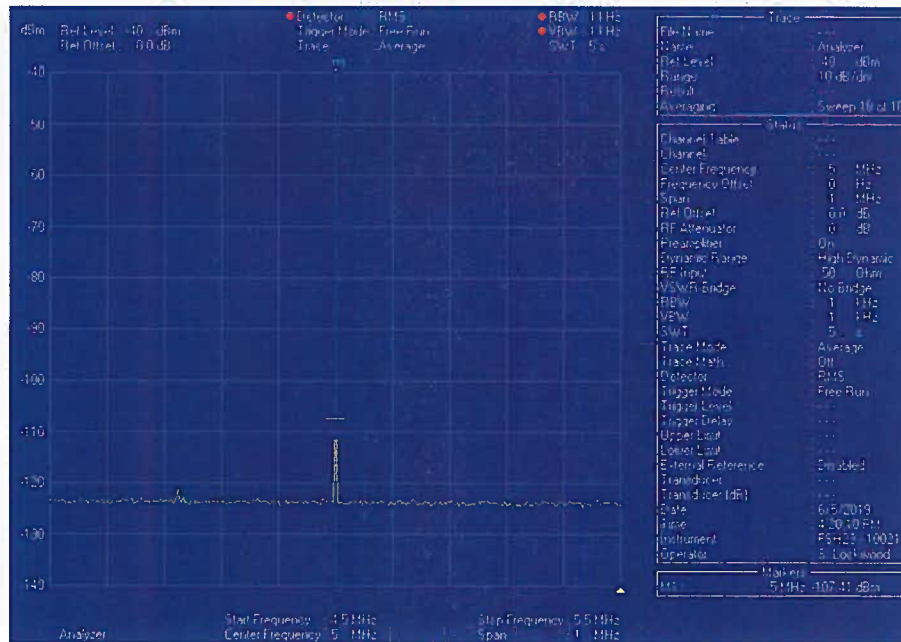


Figure 9 4.5 - 5.5 MHz (note WVVH)

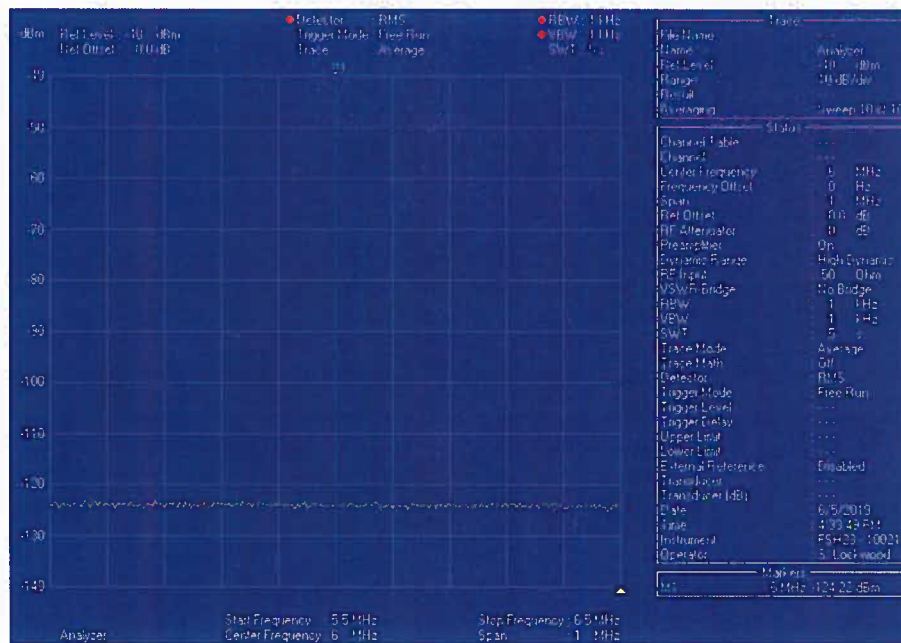


Figure 10 5.5 - 6.5 MHz



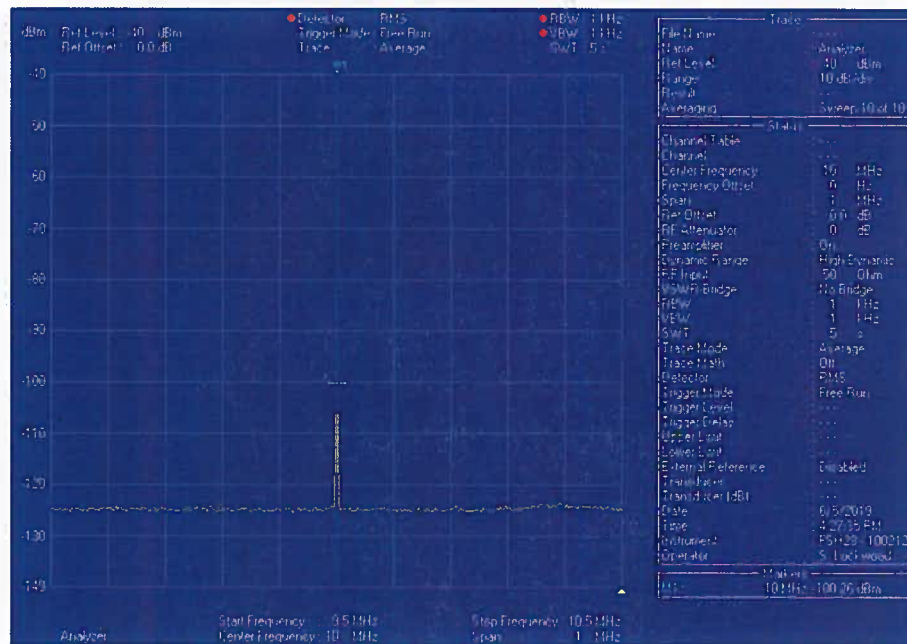
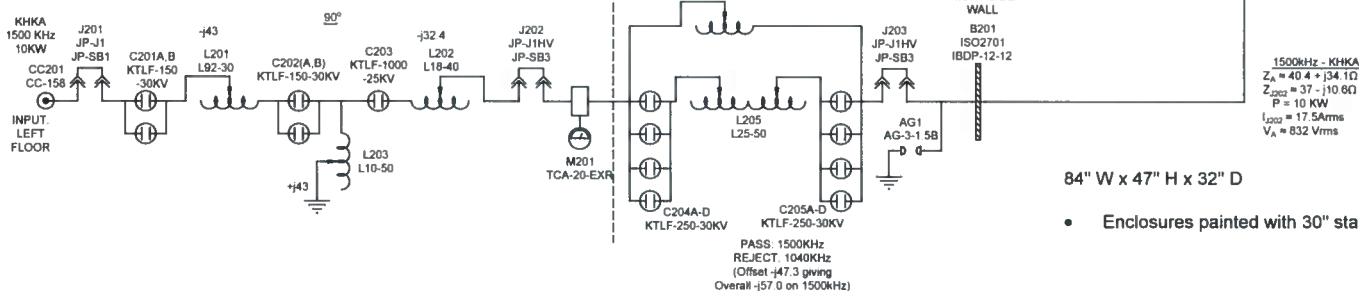
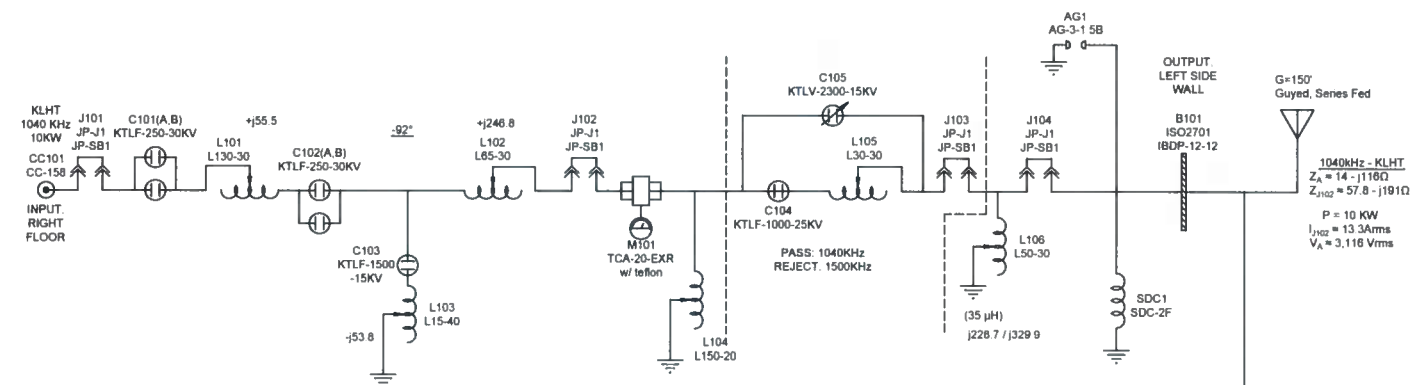



Figure 13.9.5 - 10.5 (note WWVH)

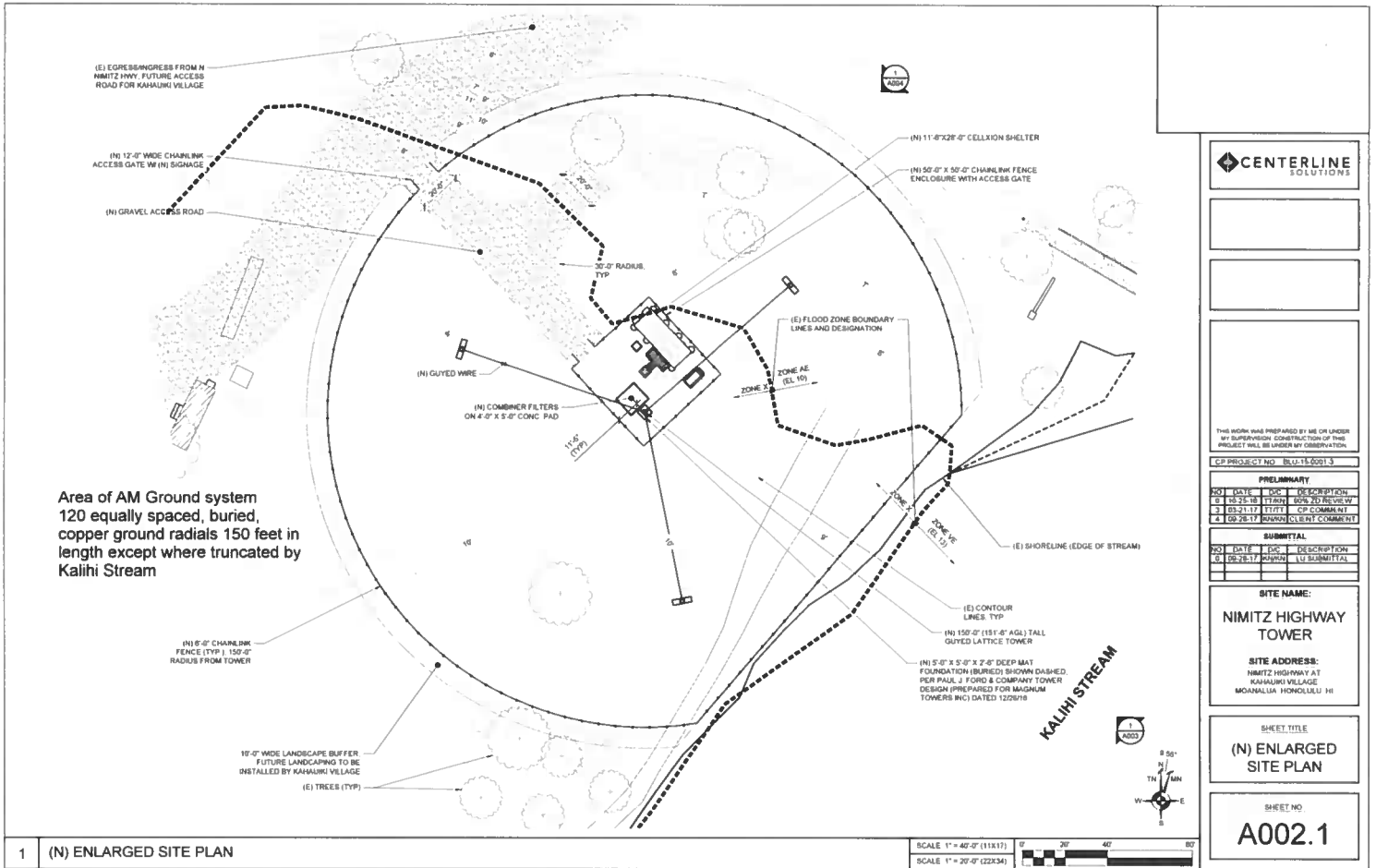
100" W x 47" H x 32" D



84" W x 47" H x 32" D

- Enclosures painted with 30" stands

 <b>KINTRONIC LABORATORIES INC.</b> BLUFF CITY, TN. COPYRIGHT 2018 KINTRONIC LABORATORIES INC.			FREQ: 1040/1500kHz POWER: 10/10kW	DIPLEXER RF SCHEMATIC KLHT / KHKA RADIO HONOLULU, HI
REV. 04	REV. DESCRIPTION: PRE-TUNED	REV. DATE: 13-NOV-18	JOB NO: 115751	THE CONTENTS OF THIS DRAWING ARE THE INTELLECTUAL PROPERTY OF KINTRONIC LABS, INC. AND ARE NOT TO BE DISTRIBUTED TO ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF KINTRONIC LABS, INC.
DWG NO: 12036-RFS-02	REF DWG.	DATE: 14-MAR-18	DRAWN: GLKING	
			DESIGNED: BCOX	
			APPROVED: JRM	





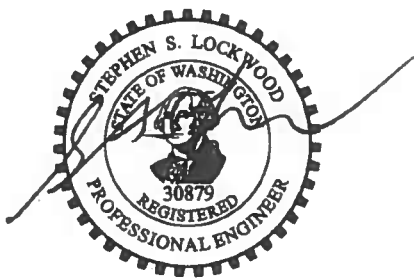
Robert A. Elder contributed to the data collection for, and preparation of this Engineering Report. He is an experienced radio engineer whose qualifications are a matter of record with the Federal Communications Commission, and presently is President of Compliance Matters, Inc., a firm incorporated in 1996, and which has since 2005 specialized in providing RF Engineering Field Support to the broadcast industry at many locations world-wide. He has served as an RF Design Engineer and Sr. Field RF Engineer at Kintronic Laboratories, Inc., and holds a BS in Physics, and a BS in Electrical Engineering, both from Rochester Institute of Technology. He hereby attests to the accuracy of the representations contained herein to the best of his knowledge.

Robert A. Elder

This Engineering Report prepared for KHKA and KLHT has been prepared by myself or under my direct supervision. All representations contained herein are true to the best of my knowledge. I am an experienced radio engineer whose qualifications are a matter of record with the Federal Communications Commission. I am a partner in the firm of Hatfield and Dawson Consulting Engineers and am Registered as a Professional Engineer in the States of Washington, Alaska, and Wyoming.

Stephen S. Lockwood

17 June 2019



**SECTION III - LICENSE APPLICATION ENGINEERING DATA**

Name of Applicant

BLOW UP, LLC

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)



Station License



Direct Measurement of Power

**1. Facilities authorized in construction permit**

Call Sign	File No. of Construction Permit (if applicable)	Frequency (kHz)	Hours of Operation	Power in kilowatts	
				Night	Day
KHKA	BP-20180419ABS	1500	UNLIMITED	5.0	5.0

**2. Station location**

State HAWAII	City or Town HONOLULU
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**3. Transmitter location**

State HI	County HONOLULU	City or Town HONOLULU	Street address (or other identification) 2625 N NIMITZ HWY
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**4. Main studio location**

State HI	County HONOLULU	City or Town HONOLULU	Street address (or other identification) 126 QUEEN STREET #204
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**5. Remote control point location (specify only if authorized directional antenna)**

State	County	City or Town	Street address (or other identification)
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6. Has type-approved stereo generating equipment been installed?



Yes



No

7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68?



Yes



No



Not Applicable

Attach as an Exhibit a detailed description of the sampling system as installed.

Exhibit No.

**8. Operating constants:**

RF common point or antenna current (in amperes) without modulation for night system 12.0		RF common point or antenna current (in amperes) without modulation for day system 12.0	
Measured antenna or common point resistance (in ohms) at operating frequency Night 34.9		Measured antenna or common point reactance (in ohms) at operating frequency Night -j30.9	
Day 34.9		Day -j30.9	

**Antenna indications for directional operation**

Towers	Antenna monitor Phase reading(s) in degrees		Antenna monitor sample current ratio(s)		Antenna base currents	
	Night	Day	Night	Day	Night	Day

Manufacturer and type of antenna monitor:

# SECTION III - Page 2

9. Description of antenna system ((f directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

Type Radiator UNIFORM CROSS SECTION GUYED TOWER	Overall height in meters of radiator above base insulator, or above base, if grounded.  45.8 m	Overall height in meters above ground (without obstruction lighting)  46.6 m	Overall height in meters above ground (include obstruction lighting)  46.6 m	If antenna is either top loaded or sectionalized, describe fully in an Exhibit.  Exhibit No.
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Excitation

☒

Series

☐

Shunt

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

North Latitude	21°	20'	06"	West Longitude	157°	53'	37"
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If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits.

Exhibit No.


Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system.

Exhibit No.

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

11. Give reasons for the change in antenna or common point resistance.

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Name (Please Print or Type) STEPHEN S. LOCKWOOD, P.E.	Signature (check appropriate box below) 
Address (include ZIP Code) HATFIELD & DAWSON CONSULTING ENGINEERS 9500 GREENWOOD AVE N SEATTLE, WA 98103	Date 10 JUNE 2019
	Telephone No. (Include Area Code) 206 783 9151

☐

Technical Director

☒

Registered Professional Engineer

☐

Chief Operator

☐

Technical Consultant

☐

Other (specify)